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OFFICE AUTOMATION SIG NEWSLETTER

VOLUME 3, NUMBER 2 JUNE 1985

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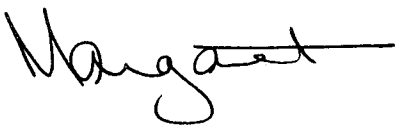
FROM THE EDITOR . . . .

New Orleans is now on my mind but already thoughts are turning to Anaheim. Many of you who read this newsletter do not attend each and every Symposium so part of my task is to try to supplement what is presented at Symposia as well as provide news of the SIG and of interest to the SIG. What would you like to see more of---less of---changed?

I have missed connections with the 12-bit World for this issue for which I do apologize. We'll try again next time.

Best wishes for a lazy, hazy (and yet productive) summer!!



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CHAIRMAN'S CHAT . . . .

Interest in office automation continues to grow and so does our special interest group membership.As we get larger, those of us who currently are members of the OA Steering Committee have been taking a close look at how to best serve your needs. We feel that our strong symposia program, including a senior management day, management specific sessions, social events, and a neophyte to technical expert track, provide for the right kind of information exchange and personal interactions. We also feel that our newsletter is pretty good. The truth of the matter is that with 4,000 plus SIG members, we just don't know. We could use your phone, personal, and letter input. What should we be doing? If we are doing things well, please tell us that too.

The DECUS organization itself continues to mature and there are some developmental problems that pop up from time-to-time. Your steering committee is trying to represent your interests in a variety of areas: long range planning, how SIG's are formed, should symposia continue in its present format, and should there be individual SIG newsletters or just one big monthly DECUS publication. If you have any questions, comments, or feelings on these or any other topics, please let us know.

The key members of the OA Steering Committee have attended three major DECUS meetings since January 1985 in an attempt to help this volunteer organization run better. Our employers have seen enough benefit from our participation in the DECUS to give us the time, all we need now is your feedback --- positive and negative.

Last, but not least, we need your lessons learned, success stories, and problem areas. We'd like to see you give us your own story in writing for the newsletter or verbally as a session at the next symposia.

More than anything else, we'd like to help you get your boss and your boss' boss involved to improve their support of your efforts. We are currently working on several projects aimed directly at middle and senior managers. Your OA SIG Steering Committee is also available to discuss these programs with you.

Have a Great Summer,

Tom

SYMPOSIUM COORDINATES . . . .

It is time to plan for Symposium in Anaheim!

Perhaps this is the Symposium that YOU will make a presentation, or participate in a pannel!!

We have always received excellent support from DIGITAL, providing us with very professional presentations, but we need USER presentations too. Please feel free to call Mitch or me to chat about how an experience you have had in your organization could benefit other users. Sharing is what its all about!! I look forward to hearing from you!

New Orleans DECUS marks several firsts for the OA SIG. DIGITAL co-sponsered a special management day with us entitled "OA Why Bother". This was a great opportunity for senior management to gain exposure to Office Automation. DIGITAL flew in outstanding speakers and provided lovely facilities for this event. We certainly appreciate DIGITAL's support and plan to make this a regular feature of Symposium. It provides a very professional environment for you to bring your senior, non-technical management to discuss organizational issues and opportunities with their peers.

In addition to our popular OA Wish List we are starting a formal mechanism to provide information to DIGITAL on office automation products. Watch for more details on how you can participate!

Ray Kaplan instigated the first OA SIG tape full of interesting and helpful tools. We encourage you to get the tape, at the very least you may get creative ideas for expanding the role of OA in your environment. Also, start collecting goodies you can contribute to the next tape.

Keep in touch! See you in Anaheim!!

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THE FORUM . . . .

LIFE ON THE EDGE -- Katherine Trimm

In a moment of enthusiasm I volunteered to write a management column for our newsletter. The management challenges are some of the toughest we face in being on the cutting edge of major new technologies. My wish is that this will become a forum for discussing management and political issues surrounding Office Automation. I look forward to your comments and contributions to this effort. The opinions here are my own, and in no way reflect upon any innocent parties.

In the last ALL-IN-1 class Ray and I taught, several managers were concerned about how to handle attempts by IBM to dislodge ALL-IN-1 sites in their companies. These were large mixed shop organizations with sucessfull ALL-IN-1 pilots. If you are in this situation the following is intended to give you ideas in working with your senior management.

In my experience senior management is primarily concerned about two things when it comes to computers, "support" and "compatibility". IBM continues to beat the competition by doing an excellent job of addressing these two concerns. The reality of this was born out in a recent Yankee Group study which identified support as far and away the critical factor in managements eyes, and IBM the leading vendor for their perceived strength in this area. (Digital was #2) The underlying philosophy here is most senior managers perfer to minimize problems rather than optimize solutions, sad but apparently true.

First we'll overcome the implied objections to Digital, the support issues and "second vendor status" because you can't "sell" anyone anything until you have over come their objections. Next newsletter we'll discuss methods for getting your management to think about using OA technology to solve a broad range of business problems and load you up with ammunition on why the strengths of ALL-IN-1 justify the "risk" of straying from the security of the big blue blanket.

Lets start with compatibility. There your management sits in the blissfull fairy tale belief in "compatibility". If they just buy IBM equipment all the employees all over the world will be happily logging on reading their mail. But how "compatible" are IBM systems with other IBM systems? Start by innocently asking questions. "Which of your IBM systems run Profs?" "What about the ones that don't?" "Is it true that IBM is going to DISOSS?" "What funtionality does DISOSS have?" "Is Profs compatible with DISOSS?" "Will there be a bridge between Profs and DISOSS, what will it cost, what utilities will be required?" And so forth. How distressing!!

But there is hope! It has been said that Digital is more compatible with IBM right now than IBM is. (Digital has some good networks people who can help you get the solutions for your company. See Bob Bradley's article on the DECnet/SNA Gateway product in this issue for more ideas.)

Shaking them up on that issue was fun wasn't it? That issue alone may justify maintaining ALL-IN-1 to hook various OA systems togather. The next issue is support. Yes we know VAXes are reliable, and Digital has beefed up field support, but, unless you are an unusual case, in OA support it is "what's up front that counts" in the support battle. There the polished IBM sales force goes calling on your senior management, having high level discussions of corporate strategy, making seamless presentations, flying management to exotic spots for multimedia demonstrations. And your poor DEC rep is demo-ing electronic mail at 1200 baud.

Do not despair, Digital has all sorts of resources to compete with IBM, but the knowledge of them out in the field is spotty. Your first weapon is your ALL-IN-1 specialist. They reside in regions or districts. There are several around the country that not only are knowledgable on the product but are skilled in management speak and enflaming the imaginations of jaded executives. (If you are having trouble finding yours, or they don't fit the above description, give us a call and we will try to point you to the right people in your area.) At least one region is bringing in internal and external consultants to make presentations and work with organizations. They also have special off site programs for senior executives called Executive Seminars which are high level and very professional. Right now you have to push, but Digital does have the resources to compete with IBM in the OA market place and make your management feel comfortable about a Digital solution.

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1. DECNET/SNA GATEWAY PRODUCT SET OVERVIEW by Bob Bradley

■ DECUS Participation

USERS is the most important word in our name, the Digital Equipment Computer Users Society. It is the interaction of the members that makes the Society the success it is. The most important fact about DECUS and its users is that any involvement at all, from simply becoming a member to serving on a committee or submitting a Library program is *all* done on a *volunteer* basis. No type of monetary reward is given to DECUS members for their DECUS activities.

But most members will tell you that the more involved you get in DECUS and its activities, the more you will benefit. There are many ways that you can get more active in the Society. Remember, a *users* society is only as good as its users make it!

Participation can range from a one-time activity to a multiple year commitment. Following is a brief list of the types of activities you can participate in as a DECUS member.

- *Submit to a Newsletter*—All the Special Interest Groups publish newsletters, many in conjunction with other SIGs. DECUS newsletters are unique because they are produced by volunteer members of the Society for others who have the same kinds of questions and concerns. *You* have the opportunity to supply articles and share "war stories," pose questions, provide answers and make your opinion known to fellow readers and to Digital. Any submission is appreciated—you could ask that one question or supply that one answer that many fellow members wanted to know.

- *Present a Paper at Symposium*—A submission may be on any aspect of the use of Digital Computers. Presentations come in all sorts of flavors, from formal papers to panel sessions to poster papers. All play a part in the symposium and all are invited. Your ideas and perceptions are unique and the reason why so many people attend a symposium.

- *Act as a Symposium Session Chairman*—Perhaps you have an interest in a topi but do not feel that you want to actually make a presentation. Volunteers are always sought to work with the speakers and serve as chairmen. Duties includ checking the room and equipment, introducing the speaker(s), evaluating the sessions, etc.

- *Submit to the Program Library* – All the programs and packages in the DECUS Library have been written and voluntarily submitted by DECUS members. Maybe you have written a program for an application that you worked with – why not share it! It may just be the tool that a fellow user is looking for. Help keep the slogan "Don't Reinvent the Wheel" alive. Submit your program and save someone else the time and aggravation!

- *Serve on a Local Users Group Committee* – Many activities take place on the local level and, just like activities occurring on the national level, volunteers are needed. Local Users Groups (LUGs) have meetings on a regular basis where other people from your area meet as a group and share ideas and concerns. Participation in activities on a local level are a good starting block for those interested in getting involved on a national level. A LUG meeting is a great place to try out your presentation or help in the organizing that is so important to assure a successful meeting.

- *Serve on a Special Interest Group Committee* – Many of the Special Interest Groups (SIGs) have working groups and task forces dealing with specific topics of interest to members of the particular SIG. Volunteers are needed to staff these working groups and share their knowledge with fellow users. Assistance is also appreciated by the Newsletter Editors – maybe you know the answer to a question posed in a Letter to the Editor – the Editor will appreciate your taking the time to respond.

- *Serve on a Functional Area Committee* – The activities planned on a national level need much thought and planning. It is important for volunteers on the Functional Area Committees to have a good "feel" for what is needed by their fellow users as far as activities are concerned. Many of the people serving on these committees have been involved in DECUS for a period of time and, therefore, have a good overview of the working of the whole society. There is a greater time commitment involved for these committees. Functional Area Committees are set up for Symposia, Library and Publications.

As you can see, the types of activities and amount of time involved is very diversified. The one common thread is that all the people volunteering have a desire to share their knowledge with their fellow members of the computing field for mutual benefit and growth.

You can contact the DECUS Office for more information on any of the above activities.

ALL-IN-1 IN ACTION . . . .

ALL-IN-1 Hints and Kinks

by
Ray Kaplan
PIVOTAL, INC.

ALL-IN-1 Hints and Kinks? Hey, you bet. This is number next in a series of indeterminate length. Yet another few months roll by without my hearing anything from YOU. YES, YOU. Since my bills keep comming in the mail, I am SURE that the my mailbox has not died! So, I am left to speculate that perhaps you haven't taken the time to drop me a line. What comes around - goes around, you know.

Never have even gotten any feed back on the FDA ALL-IN-1 manual that was offered. Since I was late in getting the tape off to folks, I thought that I would at least hear from someone about it. Ah well, maybe this month.

I still think that this needs to be a collection of ALL-IN-1 NEWS THAT YOU CAN USE. This implies that you let me know what you have experienced, or ask some questions that I can try to address. If you have comments or questions about ALL-IN-1 related topics, please send them along to me.

Ray Kaplan
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LAST TIME

Well, good 'ol RUNOFF got me again. The names for the symbols that control the behavior of DCL in the subprocess were wrong in the last column. They are $OA_DCL_START and $OA_DCL_END, not the runoff modified versions that you saw in the last column. Rather than beat on the point, I suggest (again) that you look in the V1.3 ALL-IN-1 release notes for the correct syntax. Remember that when you go to use a "_" in a runoff document, you need to preceed it with the "_" Runoff "escape" sequence (see I can really make it work!).

SIG TAPE

At this writing, a few of us are feverishly trying to promote the assembly of a SIG swap tape for the OA SIG here in DECUS land.

DECUS Symposium SIG swap tapes are collections of user submitted "goodies" that are gathered up at each of the two DECUS Symposia held each year. In general, each DECUS SIG is responsible for having (or not having) one of these collections as a SIG "project". The collections are usually assembled at the Symposium, and then the complete tape is distributed through the National LUG Organization. This means that the SIG tapes are available to DECUS members through their Local User Groups.

By far the most successful DECUS SIG tape so far is the VAX SIG tape. This big collection takes two 2400 foot mag tapes (at 1600 bpi) these days! A lot of nice goodies there that help all of us do a better job of VAXing.

If we are successful in our efforts, you will be able to get a copy of the OA SIG's first SIG swap tape right after you finish reading this! Again. IF we were successful, you should be able to get a copy of the tape through your DECUS Local User Group (LUG). If you have no idea where to find the one closest to you, try calling the DECUS U.S. chapter in Marlboro (617) 480-3259. The idea is to get involved with the local group as a quid-pro-quo for getting a copy of the swap tape. They need your volunteer energy. The OA SIG needs your energy.

At this point it looks like we will have a GREAT collection of both version 1.4 and version 2.0 ALL-IN-1 things on the tape. The more people that submit things to the tape, the better it will be.

SURVIVED

At this writing, the New Orleans Symposium is only two weeks away. It looks like I will survive it. Hope to have seen you there. If not, perhaps we will see you next December in Anaheim. If you did get to New Orleans, perhaps you will take a moment to jot down your thoughts for the this newsletter so that we all can share your point of view.

OUR MICRO VAX ARRIVES

I'm happy to report that our MicroVAX is alive and well. Kit (my consulting partner) and I do two ALL-IN-1 seminars for DIGITAL's Seminar Programs Group. We recently added a MicroVAX based demonstration facility to the seminars, and I though that you might find the details of our traveling MicroVAX based ALL-IN-1 "road show" interesting.

Our MicroVAX I is equipped with 1 Meg of DIGITAL memory and 3 Megs of "3rd party" memory from Chrislin. We have a 4 line DZQ11, dual floppys, and an RD52 5 1/4" winchester disk (31 MB). The full version 4.0 MicroVMS (actually VAX/VMS 4.0) and a full blown version 1.4 of ALL-IN-1 fit on the disk leaving over 25K blocks to play with.

ALL-IN-1 runs just fine on the MicroVAX. The problem with version 1.4 of ALL-IN-1 on the MicroVAX is that you can't use the form development sub system. In short, you can't customize ALL-IN-1 version 1.4 on the MicroVAX itself. This is due to two things. Number 1 is the old version of FMS (version 1.1) that ALL-IN-1 version 1.x uses. Number 2 is the fact that the MicroVAX has no compatibility mode (PDP-11) instruction set as the larger VAXes do. Vesion 1.1 of FMS uses two utilities (FED and FUT) which are old PDP-11 utilities that use the compatibility mode instruction set that is available on large VAXes. As a result, the FED and the FUT can't run on the MicroVAX. Since you need the FED and the FUT to customize ALL-IN-1 version 1.3, we have to do our work on a "big" VAX and download it to the "little" VAX. More on why version 1.1 of FMS is a saving grace for our VAX/VMS 3.x to 4.x conversion later.

Aside from needing a "big" VAX to do form development, the MicroVAX supports ALL-IN-1 version 1.4 in grand style. Since version 2 of ALL-IN-1 uses version 2.X of FMS (which is written in "native" mode VAX code), version 2 of ALL-IN-1 should work just fine on the MicroVAX. More on that later.

We have a LIMELITE monochrome video projector from VIVID in Santa Clara, Ca. which provides a "big screen" view of ALL-IN-1 to our class as we demonstrate it. In addition, we have an LA12 for a console and an LA50 for a printer. All in all, we have found our MicroVAX I to be a nice "road" machine. All of the equipment is packaged in shipping cases that go on the airplane with us as checked baggage when we travel. All in all, we are quite happy with it all since it does our job right nicely. If you have VAX based demonstrations to do, you will want to consider a MicroVAX based solution.

While I have not run any bench marks with it yet, I am here to tell you that it makes a right dandy demonstration machine. My guess is that it would make a great machine for the "office". Imagine your microVAX tucked away in the machine room, connected to your DECnet network via a DEQUNA (QBUS ethernet interface). Terminals on folks desks could be connected to a Local Area Terminal server (LAT) which in turn talks to the local either net, or connected directly connected by asynch lines.

My scheme would include a few asynch lines which could be connected to other local PC's in the office. We now can buy DECnet for our Rainbows and IBM PCs which uses an asynch line to talk to a host. The MicroVAX can support the new DECnet for asynch terminal lines which VAX/VMS version 4 now supports. So, in this senerio, you could easily have a MicroVAX I serving as an ALL-IN-1 host for several ALL-IN-1 users as well as providing your local PCs with a way to "talk" to the organizational DECnet network. Neat, huh? I intend to play with it a bit as soon as I can gather together some resources. I'll let you know how it all hangs together.

ALL-IN-1 and FMS

Thank goodness that ALL-IN-1 version 1.X uses the old PDP-11 code based version of FMS (V1.1)! Why do I say that? Well it turns out that you can run version 1.4 of ALL-IN-1 under version 4 of VAX/VMS. That means that you can move to version 4 of VAX/VMS even if you are not ready to convert to version 2 of ALL-IN-1. Version 2 of ALL-IN-1 will run under version 3.X or version 4.X of VAX/VMS. This is done by choosing the correct version of FMS version 2 with which to link version 2 of ALL-IN-1. If you are confused, you are not alone! This may help:

ALL-IN-1	VAX/VMS	FMS
1.2	3.X	1.1
1.3	3.X	1.1
1.4	3.X	1.1
1.4	4.X	1.1
2.0	3.X	2.1
2.0	4.X	2.2

V2

Well, it has finally arrived. By anyone's clock this new baby is at least two years late. Was it worth the wait? In my opinion, YOU BET IT WAS. If you think that implies that I am excited about the new toy, you are exactly RIGHT! I think that you will be quite happy with it.

First order, you have to find out about it. Unlike the days of version 1 there are several ways to get a handle on a handle on the new version. Quite a lot of help is also available for you in your conversion efforts.

DIGITAL's Educational Services has two new offerings in their training centers these days. There is a 2 day "ALL-IN-1 Manager" course, and a 3 day "ALL-IN-1 Tayloring" course. These are lecture/lab courses, and are quite good. I am preparing to teach them, and can assure you that they both contain quite a bit of good solid techincal detail about the management and programming of version 2 of ALL-IN-1. The neat thing is that they are lecture/lab courses. At last, a chance to spend some time with ALL-IN-1 under the watchful eye of a practiced ALL-IN-1 instructor/programmer. You can find these courses and their schedules/locations in the latest issue of "The Digest", which is the schedule of the Educational Services offerings.

DIGITAL's Educational Service's Seminar Programs group has the two seminars that my partner (KIT) and I teach. We have a 2 day offering titled Office Automation Using ALL-IN-1, in which we talk about what ALL-IN-1 is and how to use it to build an office automation solution within the framework of the organizational, managerial, and political problems that confront major projects such as office automation. Our three day offering is changing it's name. Depending on which Seminar Programs catalog you have it will be known as either "Managing ALL-IN-1 for Increased Office Productivity" or "ALL-IN-1 for System Managers". In that offering, we do 2 1/2 days of technical tutorial on how to program ALL-IN-1 and how to interface/integrate applications with/into ALL-IN-1. This offering also includes 1/2 day of project management oriented implementation presentation which is designed to help ALL-IN-1 support people successfully manage the ALL-IN-1 based office automation system within the organizational constraits that exist. You can find these courses and their locations/schedules in the Seminar Programs catalog.

DIGITAL's Software Services is offering a Migration Planning Service to help you in making your move from version 1.X to 2.0. Since version 2 is quite a departure from version 1, careful planning for your conversion effort is a must. The actual conversion effort that you will end up investing will be determined by how much you have customized your ALL-IN-1 system. Version 2 of ALL-IN-1 comes with a "conversion subsystem" which will handle most of the work of converting a "vanilla" version 1.4 ALL-IN-1 system (if there is such a thing!). The Software Services Migration Planning Service will come with a tape full of tools that will help estimate what the conversion effort will entail. When you call your local office and let them know that you want the service, they will bring out the tape and spend some time with you building a conversion plan.

ALL-IN-1 version 2 is a complicated beast, and you should carefully plan your conversion from version 1. Software Services has a lot of trained people out in the field to assist you in your work. Your local DIGITAL office can quote you on the Migration Planning Service. In addition, they have many qualified people to come out and work with you on your conversion efforts as residents.

I am sure that both Educational Services and Seminar Programs will be happy to customize any of the available training to your specific needs.

The DECUS Symposia that are held twice a year are a very good place to gather information and meet people. Information like performance details and people like your fellow ALL-IN-1 practioners. If you can't make it to any of them, you will find audio cassette tapes of many ALL-IN-1 sessions advertised for sale in the DECUSCOPE issue that follows each Symposium. Of special interest are the tapes of the performance and application integration sessions that were given at the New Orleans Symposium.

Another resource that will get you a long way is free. The version 2 documentation! Quite a NICE set of manuals. We finally have COMPLETE documentation on ALL-IN-1! In version 1 we had one little skinny Application Programmer Reference (APR). Now, we have 3 VOLUMES of it, as well as a collection of other useful things such as a two volume user guide! There are details in the manual set that will convince you that you have purchased a real office automation system. In version 1, it was hard to see ALL-IN-1's rich underlying architecture. The lack of documentation was a big stumling block to understanding it all. Hidden beneath the "example office automation system" that you get when you buy ALL-IN-1 is a very complete "applications integration tool kit". It has always been there. Now days it is not only much improved, but documented to boot. Even though version 2 of ALL-IN-1 has been completely rewritten, it still embodies the richest basic application integration architecture in the office automation industry. This bias is important in office automation, since we are usually integrating a lot of things into what becomes our office automation solution.

A parting point on all of this. Once you convert to version 2, your work is not done. You will need to spend some time "tuning" ALL-IN-1 so that your applications take full advantage of the power available in version 2 in the most efficient manner. You will need to commit some resources to not only studying how ALL-IN-1 works, but to working with it as well.

As with everything else in life, there is no free lunch here. The more time you spend with it, the better it will work for you, and the more productive your organization will become as a result. Since version 2 embodies so many changes and additions to the version 1 offering, it is not easy to treat it all fairly in this short space. I promise to do some detailed technical things in this column as time goes on, but for now I thought that it was important to tell you about the resources that exist to help you understand the new ALL-IN-1 world.

SO, WHAT IS NEW WITH V2?

As an indication of what all is in V2, here is an interesting glimpse of some of the new ALL-IN-1 version 2 power:

The expression:

```
FOR OA$DIR:"*.LIS;" DO PROMPT .%WHOLE " press RETURN"
```

will collect all files names in the current directory with the extention of ".LIS", and prompt the user with the full name of each. "FOR" is a new ALL-IN-1 function As with version 1.3, functions can be used from the named data on a form, from inside a script which ALL-IN-1 is executing on behalf of the user, or (if you must) from within the context of a command procedure in the subprocess. In version 2, you don't have to have the subprocess if you don't want it.

This was just a quick look at just one of the many ways to use the FOR function, which is just ONE of MANY new version 2 functions. There are new field processing qualifiers, new script formats, new standard subsystems, and a host of new operational philosophies.

UNTIL NEXT TIME

If you have thoughts, questions, or comments - just drop me a line. Until next time, Happy ALL-IN-1ing!

HELP WANTED . . . .

Memo: [46180.5377370.WELBORNE
Date: Thu 25-APR-1985 15:02
From: Jim Welborne
Dept: HM PH:(219) 879-3584
Tel: 219-232-3992

TO: (@OASIG)

Subject: DECmate concerns

Hello folks,

Thought I would send you a copy of a memo I recieved from a supervisor in my Administrative Suport group which outlines their view of DECspell. Also we have another concern regarding version 2.0 of WPS.

It seems that the CPTR or CHST routines which allow printing through the communications port has a problem at speeds less that 1200 baud. This effectively eliminates our using the "Upgraded" software since we print all our draft copies through the communications port.

I am not sure how to get these concerns in front of the developers but I thought I could start here. Let me know what to do next.

Jim

MEMO

TO: Jim Welborne
Judy Heritz

FROM: Judy Hernandez

DATE: April 24, 1985

RE: DECSPELL EVALUATION

On March 6 and 7, 1985 I tested DECspell with several documents. Following are some observations on its performance.

DECspell works through CP/M, consequently requiring that a DECspell diskette be loaded onto the system diskette each time DECspell is to be used. I found this to be time consuming, along with maximizing the risk of damage with so much disk handling. If all operators should use DECspell, we would either need to purchase a DECspell diskette and a dictionary diskette for each operator, or 'pass around' these two diskettes to those operators who needed them. An operator does need both diskettes in order to operate DECspell.

DECspell contains no buffer to facilitate giving it a chain of documents to check. Therefore, an operator must check one entire document, then return to the main menu, choose DECspell, and repeat the procedure.

When DECspell encounters a misspelled word, the operator may choose to:

edit,
change to a choice the computer gives,
continue without changing, or
ignore.

The 'ignore' choice is purported to allow the operator to tell the computer to 'ignore' a word once, so that when the word is subsequently encountered, DECspell will not stop again. This never functioned properly at all. DECspell would stop every time it encountered something it had previously been instructed to ignore.

Although I loaded each letter of the alphabet in the personal dictionary in any manner it could occur, such as a), a., or a. DECspell would stop each time it encountered the letter b or t alone. When told to ignore, it would continue to stop on these letters.

When 'edit' is chosen from DECspell, the operator may edit only within the line of text containing the misspelled word. Should the operator spot a grammatical error or something else she wishes to change, she cannot reach it from this 'edit' mode. When she has finished with the spelling check, she will not know where the error she wanted to correct occurred, as DECspell gives no status regarding your location within the document.

I telephoned Digital Support regarding these problems. They said that this often happened in larger documents, and they suggested breaking the document up into smaller portions.

In my opinion, Digital does not have DECspell advanced to the point where it would be a reliable tool.

JCH:sl

THE OA TELL-A-GRAM _

NEEDS:

✓ I WOULD LIKE SOME INFORMATION ON OS-278
(I especially wish to use it on a DECmate II with a CP/M board)

NAME/TITLE DK Oberlander, Supervisor, Internal Info. Sys.

ADDRESS/MAIL STOP [redacted] SCM Corp. - T.I.S., 16651 Sprague Rd

CITY Strongsville STATE OH ZIP 44136

PLEASE RETURN TO MARGARET DRAKE
DIRECTOR OF INSTITUTIONAL MANAGEMENT SUPPORT
UT HEALTH SCIENCE CENTER
7703 FLOYD CURL DRIVE
SAN ANTONIO, TEXAS 78284

FEATURED ARTICLES . . . .

DECnet/SNA Gateway Product Set Overview

Revision 1.0

Bob Bradley
Manager,
IBM Interconnect Strategic Business Unit
Networks and Communications Engineering
30 December 1984

DECnet/SNA PROGRAM BACKGROUND

For almost fifteen years, Digital has successfully sold products and service that accommodate the "complementary computing" concept for customers tha require Digital/IBM networking capabilities. Products that allowed batch acces from Digital systems to IBM mainframes using the BSC or "bisync" protocols wer first implemented for PDP-8s. These first "distributed processors" were use either a standalone fashion or as front end processors to the early members o the DECSystem mainframe product line. Follow on products for PDP-11 and VA systems were released so that by the end of the 70's, Digital offered IB access "across the boards" as well as releasing it's third generation of pee to peer networking products known as DECnet Phase III.

Since 1980, Digital has made public commitments and delivered products tha support communications between the IBM environment based on Systems Netwo Architecture (SNA) and the Digital environment based on Digital Netwo Architecture (DNA). During that time period, the most significant market ent was the DECnet/SNA Gateway program which was launched in 1982. Since the there have been enhancements for both VAX/VMS, MicroVAX/MicroVMS, and PDP systems in accessing the IBM environment via the DECnet/SNA Gateway.

DECnet/SNA PRODUCT SET BACKGROUND

Many existing and future DECnet/SNA Gateway customers have realized the potential and power that can be had by linking two networking environments versus simply providing "protocol emulation" of specific IBM products. One profile of typical Gateway usage was that it was a Digital terminal user that needed access to applications and files on the IBM host system. Such access could be provided by the use of the 3270 Terminal Emulator (3270 TE) and Remo Job Entry (RJE) access software. Certain custom applications required program development on both the Digital and IBM systems and hence, the Application Program Interface (AI) could be used.

Since the DECnet/SNA Gateway's introduction, the need for more sophisticated functions and more "reverse gateway" turnkey function quickly became apparen In ever increasing numbers, IBM terminal users developed a need and desire t access applications and information at remote VAX systems. Additionally, functions such as document exchange or electronic mail between dissimilar systems became a necessity between the two networking environments.

For years, the focus for the ultimate source and destination of central d bases, large computing resources, etc. has been in an IBM host based comput facility. Today, this situation still exists, however there is an increa need for accommodating access for the IBM users into the Digital environme Until now, to achieve this access would have been impractical due to the f that the IBM user would either have to have "two terminals on his/her desk" simple do without! New products announced by Digital in October 1984 solve t problem for the IBM 3270 user!

DECnet/SNA GATEWAY PRODUCT SET SUMMARY

The DECnet/SNA Gateway product set allows users to share information between suitably configured VAX/VMS, MicroVAX/MicroVMS, RSX-11M and RSX-11M-PLUS (RSX) systems in a DECnet environment and IBM systems in a Systems Network Architecture (SNA) environment. Users on one or more DIGITAL systems can simultaneously access IBM application programs or other system resources, act as a 3270 display station, transfer data between VAX/VMS or RSX file subsystems and IBM batch subsystems acting as an RJE workstation, allow IBM 3270 display users within an SNA network to remotely log into suitably configured VAX/VMS systems, receive print data destined for 3287 class printers, and implement distributed application programs that run between DIGITAL and IBM systems.

The DECnet/SNA Gateway family includes two variants of the Gateway system itself and a variety of Access Routine layered software for each supported operating system.

THE DECnet/SNA GATEWAY ITSELF

The DECnet/SNA Gateway (also referred to as "Gateway") is part of both the DECnet and the SNA networks. Architecturally, it is a DECnet Phase IV node to DECnet and a Physical Unit Type 2 node to SNA. Each Gateway is a node on a DECnet network and the DECnet network can include multiple DECnet/SNA Gateways. The non-Ethernet based DECnet/SNA Gateway (DX24) is a combination freestanding software/hardware package which may be configured as a part of a wide area DECnet network (WAN), and may be geographically co-located with DIGITAL or IBM systems.

The Ethernet based DECnet/SNA Gateway (DECSA) connects directly to a DECnet based Ethernet Local Area Network (E-LAN), providing SNA connectivity to any Phase IV DECnet system physically connected to the E-LAN or DECnet systems that are logically connected to the E-LAN thru either the DECnet Router communications server or those DECnet systems that support the host routing facility onto and from the E-LAN. The software that is used within the Ethernet-based DECnet/SNA Gateway must be ordered in addition to the appropriate Ethernet Communications Server (DECSA) hardware configuration.

In either case, Digital systems wishing access to the SNA environment must be configured with the appropriate Gateway Access Routine software.

Both Gateway variants will support up to two SNA communications lines at speeds of 9.6K bps. Alternatively, the Ethernet based Gateway will support two 56K bps line to the SNA network. Both local and remote connections are supported from either Gateway variation into the IBM/SNA network.

Loading the Gateway Software

Both Gateways require software to be loaded into memory prior to operation. For the DX24 Gateway, the software provided is loaded directly into the system via floppy diskettes from disk drives that are part of the standard DX24

configuration. Additionally, at least one VAX/VMS or RSX system must be adjacent to the DX24 Gateway to provide host (Gateway Management) services. Software for the E-LAN based Gateway is loaded from an RSX or VAX/VMS host also on the E-LAN.

DECnet/SNA GATEWAY ACCESS ROUTINES

Once the DECnet/SNA Gateway hardware and software is properly installed, there is another component required before actually performing any actual functions or "real work". Each Digital system requiring communication with an SNA network must have some number of layered software products installed on that system that provides the end-user, turnkey function. This layered software group is collectively referred to as "Access Routines". These Access Routines run as VMS processes or RSX task images that work in conjunction with the DECnet/SNA Gateway to do 3270 Terminal Emulation, Remote Job Entry, and the like. DECnet is used as the reliable, error free transport mechanism between the various Digital systems in the DECnet network and the Gateway itself.

Access routines are available for VAX/VMS, MicroVAX/MicroVMS, or RSX systems today. At Fall DECUS in December 1984, Digital made a statement of direction that it would provide Access Routines for the TOPS-20 operating system environment for its DECSystem-20 user community.

Access Routines differ in their "end user" function. In all, there are currently 19 different Access Routines available now for the above mentioned operating system enviornments and consist of the following types of uses:

- 3270 Terminal Emulation (VMS, MicroVMS, RSX)
- Remote Job Entry (VMS, MicroVMS, RSX)
- Application Program Interface (VMS, MicroVMS, RSX)
- DISOSS Document Exchange Facility (VMS, MicroVMS only)
- Distributed Host Command Facility (VMS only)
- 3287 Printer Emulation (VMS, MicroVMS only)

The DECnet/SNA Gateway Management Access Routine software is required on the VAX/VMS, MicroVAX/MicroVMS, or RSX host node adjacent to the DX24 Gateway that is used to manage the DX24 Gateway as well as on any DECnet nodes desiring to run any of the optional Access Routines in either the DECSA or DX24 configuration.

DECnet/SNA GATEWAY MANAGEMENT

Gateway management includes normal DECnet network management tools for controlling, monitoring, and troubleshooting the Gateway itself. These activities may be performed by the VAX/VMS or RSX system manager of one of the nodes attached to the DX24 Gateway or, for the DECSA version, at a designated host node on the E-LAN. All management functions are performed from a node on the Digital network, rather than at or on the Gateway itself.

The Gateway Management Routines allow a VAX/VMS or RSX operator to bootstrap or restart a Gateway and provide configuration and initialization facilities for the Gateway.

In addition to event logging and error counters, a wide range of fault isolation tools are included such as an SDLC frame level loopback is available to verify communication facilities as well as the connection to the IBM line adapter, a trace capability for the SNA lines is provided to help debug application programs, as well as identify system problems at the Physical Unit (PU) level, SDLC level, or session level.

A "snapshot" monitoring utility is provided to display on a Digital host-controlled VT100 terminal the status of the Gateway's buffer availability, the number of SNA sessions currently in progress, and other information that pertains to both the DECnet and SNA network.

If an unrecoverable error should occur during operation of either type of Gateway system, a memory image may be dumped to the adjacent VAX/VMS or RSX system (DX24 configuration) or to a designated E-LAN host (DECSA configuration).

DECnet/SNA 3270 TERMINAL EMULATION

The 3270 Terminal Emulator (TE) allows the user of a VT100 (or other DIGITAL terminal or personal computer in VT100 emulation mode) on a suitably configured VAX/VMS, MicroVAX/MicroVMS, or RSX system to interact with programs on an IBM system which were written for 3270 display stations.

Translation tables on the respective systems convert RSX or VAX/VMS ASCII terminal input to a subset of IBM multinational EBCDIC code for transfer thru the Gateway. These may be modified to fit non-standard character sets.

The 3270 Terminal Emulator supports emulation of the following features of an IBM 3270 Display Station:

- IBM 3274 model 1C controller with the following features:
  - * Category A terminal adapter (for 32 terminals)
  - * Configuration support B (excluding inbound pacing)
  - * Common comunications adapter
  - * External modem interface
- IBM 3278 model 1 or 2 display station with the following features:
  - * 75-key keyboard with 24 program function (PF) keys and 3 program assist (PA) keys
  - * Numeric lock
  - * Audible alarm
  - * 480-, 960-, 1920- and 3168- (24x132 on VT100 screen) character screens
  - * Protected and unprotected fields
  - * Local and host copy and printer order FF (formfeed)
  - * Alphanumeric and numeric data
  - * Intensified display, display, and non-display characters
  - * Auto-repeat keys (as available as a VT100 keyboard SET-UP feature)
  - * Click and ALT CURSR (as available through the VT100 SET-UP feature)

This product has been designed such that it can be used with most IBM applications, however, those applications written using features not supported by the emulator (e.g. 3279 Color Features) must be modified. The following are among the features of the conventional IBM 3270 product that are not currently supported:

- Selector pen, security lock, magnetic strip card reader and operator identification card reader
- ->! (tab) and <-! (new line) as auto-repeat keys
- <!<! (fast left) and !>!> (fast right) keys
- TEST REQ or TEST, SYS REQ, IDENT, DEV CNCL, CURSR BLINK and CURSR SEL key functions

- Structured fields
- Programmed fields
- 2560-, 3440-, and 3564-character screens
- 3278 Display Station numeric lock override
- 3279 Display Station color support

A readily callable HELP facility provides information on keys with altered 3270-oriented functions. The status line as implemented on an actual 3270 display is not supported, however much of the same information is reported on a special status line which may be overlayed on the VT100's 24th line.

DECnet/SNA REMOTE JOB ENTRY

The Remote Job Entry (RJE) Access Routine allows a VAX/VMS, MicroVAX/MicroVMS, or RSX system within a DECnet network to function as an SNA/RJE workstation or group of workstations that can transmit batch jobs to an IBM host and receive job output. The user can prepare batch jobs in files, submit the jobs, and obtain the job output. By using batch interaction with the IBM host system, this capability can be used for periodic update of databases and other applications. Easily modified translation tables resident in the Gateway convert ASCII code to a subset of IBM multinational EBCDIC for transmission to the IBM host, and from EBCDIC to ASCII on reception of job output.

Workstation users submit jobs to VAX/VMS or RSX system batch queues. The workstation transmits the queued jobs to the IBM host over the input streams associated with a queue.

The IBM host returns job output to a workstation over various output streams. Each IBM output stream will have a VMS or RSX directory assigned to it. Job output may be directed to some system on the DECnet network other than the initiating system.

VMS or RSX users with the required privilege can issue a set of restricted commands to manage the workstation. These commands allow the user to initialize and control the workstation, and to communicate interactively with the IBM batch subsystem.

DECnet/SNA APPLICATION INTERFACE

The Application Interface (AI) enables a user-written application in a DECnet-VAX or DECnet-RSX node to exchange messages with a cooperating application in an IBM host. It exists in the VAX/VMS system as a shareable image, and in the RSX system as a device driver.

Functionally, the interface is similar to the DECnet task-to-task capability. The interface is very general and allows most features of the SNA Session Layer to be accessed by the cooperating applications. It provides VMS and RSX users with mechanisms for accessing IBM systems from applications programs. This facility is particularly useful for applications that require facilities other than RJE and 3270 Terminal Emulation such as support for Logical Unit Type 0 for communicating with IMS/VS or CICS/VS host based applcations.

The Application Interface appears to the Digital application as a set of functions that the application calls to request the following operations:

- Establish an SNA session with an application running on an IBM host
- Listen for a session initiation request from an IBM application
- Accept an SNA BIND request from an IBM application
- Reject a BIND request from an IBM application
- Abort an active session
- Transmit messages to an IBM system on the SNA normal or expedited flow
- Receive messages from an IBM system on the normal or expedited flow

Subroutine calls to the Application Interface are supported from VAX/VMS programming languages that conform to the VAX/VMS Calling Standard. Calls from RSX programming languages are a part of the QIO system structure.

Certain events can occur asynchronously during a session between two cooperating applications. For example, the IBM system may send a message on the Expedited Flow, the IBM host or the Gateway may abort the session, or the DECnet logical link to the Gateway may fail. When such events occur, the Application Interface notifies the application by calling a user-specified notification mechanism.

The Application Interface provides applications with access to the SNA functions performed by the Gateway. These include SNA Path Control functions, Data Link Control functions, and upper-level functions.

The application must provide the remaining SNA functions it requires. These include Logical Unit (LU) Presentation Services, Date Flow Control functions, and Transmission Control functions.

DECnet/SNA DISOSS DOCUMENT EXCHANGE FACILITY

The DISOSS Document Exchange Facility (DDXF) is a VMS or MicroVMS layered software product which allows its users within a DECnet network the bidirectional ability to participate in an IBM office systems network. The IBM office network is the vehicle for document library and distribution services in an IBM Systems Network Architecture (SNA) networking environment.

DDXF users can access both document distribution and library services as provided by the IBM host supported Distributed Office Support System/370 (DISOSS/370) program product. DISOSS/370 provides centralized document library and distribution services on behalf of various IBM office systems such as:

* IBM Displaywriter
* 5520 Administrative System
* IBM 8100 Information System running the Distributed Office Support System/8100/Distributed Office Support Facility (DISOSS/8100/DOSF)
* Scanmaster I image printer

DDXF communicates with the DISOSS/370 host system using the SNA Advanced Program to Program Communication (APPC) facility (also referred to as Logical Unit (LU) Type 6.2) and the Document Interchange Architecture/ Document Content Architecture (DIA/DCA) protocols.

DDXF accepts both final-form-text and revisable-form-text documents. DDXF will accept either document type for transmission or reception but transform routines are provided for final-form-text documents only. Final-form-text documents are translated by DDXF to/from ASCII text after reception of/ prior to transmission of a document. This allows a VAX/VMS user to perform minor revision on a received document via a text editor such as EDT.

The following list summarizes the functions provided by DDXF. A DDXF user can:

- o FILE A DOCUMENT created on the VAX/VMS system with associated profile information in a DISOSS/370 host document library.
- o FILE PROFILE information for an external (non-system) document in the DISOSS/370 host document library.
- o SEARCH a DISOSS/370 host document library for documents previously filed by themselves or by other DISOSS/370 users including users of IBM office systems such as the Displaywriter, 5520, or 8100/DOSF.
- o RETRIEVE DOCUMENTS and associated profile information to the VAX/VMS system from the DISOSS/370 host document library.
- o DELETE OWNERSHIP of documents filed in the DISOSS/370 host document library.

- o ADD search terms and MODIFY access codes for documents filed in the DISOSS/370 host document library.
- o PRINT a document, filed in the DISOSS/370 host document library, on a DISOSS/370 host controlled printer.
- o SEND, via the DECnet/SNA Gateway and the DISOSS/370 host, documents and/or messages to either individuals or groups that are DISOSS/370 users.
- o RECEIVE DOCUMENTS and/or MESSAGES distributed by other DISOSS/370 users via the DISOSS/370 host system.
- o DISPLAY STATUS information regarding distribution requests made by DDXF to the DISOSS/370 host system.

DECnet/SNA DISTRIBUTED HOST COMMAND FACILITY

DECnet/SNA VMS Distributed Host Command Facility (DHCF) is a VMS layered software product which is used in conjunction with the DECnet/SNA Gateway. It allows a suitably configured VAX/VMS system within a DECnet network to be accessed from IBM host-controlled 327x terminals in a Systems Network Architecture (SNA) networking environment. The IBM system gains access to VAX/VMS systems through the DECnet/SNA Gateway.

The vehicle for supporting this or "reverse terminal" access from IBM to Digital systems is the IBM host based program product called the Host Command Facility (HCF). This ability now opens up the world of VAX/VMS and the Digital style of computing to the IBM 3270 display user in the IBM/SNA network. From this 3270 display, the IBM user may log into remote VAX/VMS systems, read or send VMS mail, perform some file editing, allocate VMS systems resources, and execute VMS commands like any other VMS user on a hard copy terminal. Additionally, DHCF allows the 3270 terminal operator at the central site, the Network Control Center, to access the maintenance, service, and control functions of the remote system for problem determination, problem isolation, and remote system control. DHCF extends to the IBM 3270 user some of the bi-directional capabilities that Digital VT100 users have had for some number of years.

As mentioned earlier, DHCF is another VAX/VMS Access Routine in the DECnet/SNA Gateway product set. It is a layered application for a VAX/VMS system that allows IBM's Host Command Facility (HCF V2) Program Product running on an IBM mainframe to communicate with VAX/VMS systems.

In summary, DHCF allows a single IBM 3270 terminal to access both networks! The difference between 32 J Terminal Emulation and DHCF is a matter of direction: DEC-to-IBM vs IBM-to-DEC. These two products gives the DECnet/SNA Gateway turnkey bidirectional capabilities.

The following is a summary of features available in the DHCF software:

- The DHCF user may run any VAX/VMS application which can run in command mode or line mode.
- The DHCF user may also run any VAX/VMS application which is designed to use a 3270 data stream in a 3270 pass-through mode. (Such VAX/VMS applications may provide full screen access for the DHCF user at the IBM host.)
- A DECnet/SNA Gateway manager may perform the following tasks using the DHCF management application:
  - * Modify the EBCDIC-to-ASCII translation table
  - * Modify the keyboard mapping
  - * Create the configuration file required for DHCF

  This application program also displays the keyboard mapping and creates help text which is output at the initiating 327x terminal.

- The initial connect screen may be modified by the DECnet/SNA Gateway manager.
- The documentation set specifies the IBM parameter values which are required to initialize the IBM application software in order for communication with DHCF to occur.
- The documentation set includes an introduction to VAX/VMS for DHCF users, written with IBM users in mind.
- Error messages are reported to the DHCF user in easily understandable language.

User Interface

The IBM 327x terminal user logs on to HCF running in the IBM host and enters the conventional HCF ACQUIRE command to connect to the DECnet/SNA Gateway. Then, DHCF sends an initial connect screen to the IBM 327x terminal user which is similar to comparable panels displayed by VTAM. The DHCF user then enters the name of the DECnet node he wishes to access. When the DHCF user's request has been routed to the desired node, he must logon to the VAX/VMS system in the usual manner.

When connected to a VAX/VMS system, the DHCF user may interact with the system in command mode (line mode) as if the 327x terminal were a hard copy terminal.

DECnet/SNA PRINTER EMULATION

The DECnet/SNA Printer Emulator (PrE) is a layered software product that allows suitably configured VMS or MicroVMS systems within a DECnet network to receive printable data from IBM host-based applications. These applications will originally have been developed to produce output for an IBM 3287 printer when operating in system mode while connected to an IBM 3274 cluster control unit in a Systems Network Architecture (SNA) environment.

Data transfer is one way in nature from IBM host to the emulated printer. The PrE Access Routine software will allow VAX/VMS users to direct the received output to any valid VMS device, be printed via the VMS print symbiont, or spooled to a disk file.

Product Features

The following is a summary of functions provided by PrE:

o For ease of use, PrE is configured and controlled via a DIGITAL Command Language (DCL) style interface.

o PrE can accept data in SNA Character String (SCS) format (LU Type 1) and 3270 Data Stream format (LU Type 3)

o PrE recognizes the following 3270 Data Stream orders:

CR - Carriage Return
DUP - Duplicate (converted to a semicolon)
EM - End Message
EUA - Erase Unprotected to Address
FF - Formfeed
FM - Field Mark (converted to an asterisk)
GE - Graphics Escape (converted to a hyphen)
NL - Newline
PT - Program Tab
RA - Repeat to Address
SBA - Set Buffer Address
SF - Start Field

o PrE supports the following 3270 Data Stream commands:

WRITE
ERASE/WRITE
ERASE/WRITE ALTERNATE
ERASE ALL UNPROTECTED

o PrE will recognize the following SNA Character String orders:

BS - Backspace
CR - Carriage Return
FF - Formfeed
GE - Graphics Escape (converted to a hyphen)

HT - Horizontal Tab
IRS - Inter Record Separator
LF - Linefeed
NL - Newline
SHF - Set Horizontal Format
SVF - Set Vertical Format
TRN - Transparency
VCS - Vertical Channel Select
VT - Vertical Tab

o PrE accepts but ignores the following SNA Character String orders:

BEL - Bell
ENP - Enable Presentation
INP - Inhibit Presentation
SLD - Set Line Density

o PrE supports the 3287 printer Program Attention (PA1 and PA2) keys and the CANCEL PRINT key using commands entered at the user interface.

o PrE does not support the Printer Authorization Matrix feature, and it does not emulate the 3287's REPRINT key function.

MINIMUM HARDWARE REQUIRED TO SUPPORT THE DECnet/SNA GATEWAY

In Wide Area Networks:

o A properly configured DX24 DECnet/SNA Gateway which includes at least one DMR11 and a hardcopy console terminal. The DMR11 and the hardcopy console terminal are not part of the standard DX24 base configuration and must be ordered seperately.

o A valid VAX/VMS, RSX-11M, or RSX-11M-PLUS Operating System configuration with a valid DECnet connection to the DECnet/SNA Gateway (R80/RL02 configuration required for VAX-11/730 systems).

In Ethernet Local Area Networks:

o DECSA-FA 1-line DECnet/SNA Gateway with one DCSAX-LA EIA RS-232C/V.24 synchronous line card

o Any valid VAX/VMS, RSX-11M, or RSX-11M-PLUS Operating System configuration with valid DECnet implementation, also connected to the Ethernet Local Area Network (R80/RL02 configuration required for VAX-11/730 systems). This host system configuration must include a hardcopy terminal for Gateway Management routine report generation. Additionally, the RSX-11M and RSX-11M-PLUS system configuration must include support for RL02s or 1600 bpi magnetic tape.

OPTIONAL HARDWARE TO SUPPORT THE DECnet/SNA GATEWAY

For Wide Area Networks:

- One additional DMR11 (local or remote) for additional connection to the DECnet system
- One additional DUP11 synchronous line unit for additional connection to the SNA network

For Ethernet Local Area Networks:

- One additional DCSAX-LA one-line EIA RS232C/V.24 synchronous line card operating at speeds up to 9.6K bps.

  OR

- One additional DCSAX-LB one-line V.35 synchronous line card operating at speeds up to 56K bps.

  OR

- Two DCSAX-LB one-line V.35 synchronous line cards operating at speeds up to 56K bps. This configuration is achieved by replacing the DCSAX-LA that is part of the base DECSA system with one of the DCSAX-LB line cards.

MINIMUM HARDWARE REQUIRED TO SUPPORT ACCESS ROUTINES

- Any valid VAX/VMS, RSX-11M-PLUS or RSX-11M Operating System configuration with valid DECnet connection to the DECnet/SNA Gateway. RSX-11M and RSX-11M-PLUS system configurations must be configured to support RL02s, RK07s, or 1600 bpi mag tape.
- To support 3270 Terminal Emulation Access Routine: Digital terminal capable of VT100 compatibility (e.g. VT102, Rainbow 100)
- The Advanced Video Option is required on the VT100 and the equivalent on other terminals for some 3270 Terminal Emulation features.

PREREQUISITE SOFTWARE:

- VAX/VMS, MicroVAX/MicroVMS, RSX-11M or RSX-11M-PLUS Operating System(**)
- DECNET-VAX, DECnet-11M, or DECnet-11M-PLUS

For the Ethernet-based DECnet/SNA Gateway, the following software must be ordered:

- DECnet/SNA Gateway software that is down line loaded over the E-LAN into the Gateway from an E-LAN based VAX/VMS or RSX host system.

For both wide area network and E-LAN based DECnet/SNA Gateways:

- DECnet/SNA Gateway Management Access Routines.

THE OA TELL-A-GRAM . . . .

NEEDS:

__I WOULD LIKE SOME INFORMATION ON _____

_____

__I WOULD LIKE AN ARTICLE IN THE NEWSLETTER ON _____

_____

__I WOULD LIKE A SYMPOSIUM SESSION ON _____

_____

__OTHER _____

NEWSLETTER:

__I WILL WRITE AN ARTICLE ON _____

__OTHER _____

SYMPOSIUM:

__I WILL MAKE A PRESENTATION

__I WILL CHAIR A SESSION

__I WILL "MC" AN OA MAGIC SESSION

__I WILL OPERATE A CAMERA/TAPE RECORDER FOR A SESSION

__I WILL "MAN" THE OA SUITE FOR A TWO-HOUR BLOCK OF TIME

__OTHER_____

COMMENTS:

_____

_____

NAME/TITLE_____

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PLEASE RETURN TO MARGARET DRAKE
DIRECTOR OF INSTITUTIONAL MANAGEMENT SUPPORT
UT HEALTH SCIENCE CENTER
7703 FLOYD CURL DRIVE
SAN ANTONIO, TEXAS 78284